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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,252	01/27/2004	Thomas G. Rukavina	1908A1	9565

7590 02/24/2005

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EXAMINER

TRAN, THAO T

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/765,252

Applicant(s)

RUKAVINA, THOMAS G.

Examiner

Thao T. Tran

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/21/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 11 is objected to because of the following informalities: line 5, "diisosocyanate" should be changed to --diisocyanate--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6 and 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Reich et al. (US Pat. 5,563,233).

Reich teaches a coating composition, comprising a polyurethane polyol precursor comprising the reaction product of a diisocyanate, such as trimethylhexamethylene diisocyanate; a diol, such as ethyl 1, 3-hexanediol; a polycarbonate diol; and water (see abstract; col. 4, ln. 1-16; col. 5, ln. 27-39; col. 11, ln. 63-64).

Reich teaches the reaction mixture comprising about 0.01-10% of the aliphatic diol, about 0.001-0.8% of diisocyanate, about 20-96% of total diols, and the mole weight ratio of NCO/OH from about 0.3-1.2, which appears to read on the instantly claimed ranges.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7, 10-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reich as applied to claim 1 above:

Reich is as set forth in claim 1 above or incorporated herein.

In regards to claims 7 and 18, Reich teaches the diol used in the reaction product to be ethyl-1,3-hexanediol or methyl-1,3-propanediol (see col. 4, ln. 9-13), which are the same as disclosed in the instant specification. Reich further teaches 2,4-pentanediol and methyl-1,3-pentanediol as alternative diols. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that the use of hexanediol as taught by Reich would have yielded the same results as the use of 1,5-pentanediol, since hexanediol is disclosed as an alternative diol in the instant specification.

In regards to claims 10-11, 20, Reich teaches a coating composition, comprising a polyurethane polyol precursor comprising the reaction product of a diisocyanate, such as trimethylhexamethylene diisocyanate; a diol, such as ethyl 1, 3-hexanediol; a polycarbonate diol; and water (see abstract; col. 4, ln. 1-16; col. 5, ln. 27-39; col. 11, ln. 63-64).

Reich further teaches a portion of water can be substituted by an amine, wherein the amine reacts with isocyanate groups to form a urea group; and at high temperature and excess isocyanate, the urea reacts with another isocyanate group to form biuret (see col. 5, ln. 60-67).

Although Reich does not specifically teach the biuret of hexanediisocyanate, Reich teaches the use of hexamethylene diisocyanate or cyclohexyl diisocyanate (see col. 5, ln. 27-30). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that the biuret formed by reacting the amine group with hexamethylene or cyclohexyl diisocyanate would have given the same results as the instantly claimed biuret.

In regards to claims 12-14, Reich further teaches the use of dibutyl tin dilaurate as a catalyst and the solution contains additives such as colorants or fillers (see col. 3, ln. 34-35; col. 6, ln. 1-6).

In regards to claims 15-19, the same arguments are as presented in claims 2-7 and 12-13 above.

In regards to claim 22, Reich teaches the solution applied on body or face (see col. 3, ln. 34-38).

In regards to claims 21 and 23, although the reference does not teach the substrate to be glass or polycarbonate, since the reference teaches the same coating composition, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that Reich's coating composition would also have been used to coat glass or polycarbonate substrate, as instantly claimed.

Contact Information

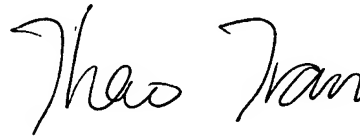
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 8:30 a.m. - 5:00 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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February 21, 2005



THAO T. TRAN
PATENT EXAMINER